

WHAT IS CLAIMED IS:

1. A control system for an AC motor having a predetermined horsepower rating, comprising:
 - a plurality of integrated AC motor control systems each of which having a horsepower rating less than the AC motor to be controlled, each of said integrated systems comprising an input rectifier section, a DC bus section an output inverter section and a controller section;
 - a common, 3 phase AC input communicating with the rectifier section of each integrated control system;
 - a common DC bus communicating with the DC bus section of each integrated control system;
 - a common, 3 phase, variable frequency, pulse-width-modulated output communicating with the output inverter section of each integrated control system; and
 - a parallel controller interfaced with each integrated control system controller.
2. A method of controlling an AC motor of predetermined horsepower, comprising the steps of:
 - providing a plurality of integrated AC motor control systems each having a horsepower rating less than the AC motor to be controlled and each of said integrated control systems comprising an input rectifier section, a DC bus section an output inverter section and a controller section;
 - applying a common, 3 phase AC input to the rectifier section of each integrated control system;
 - supplying a common DC bus for the DC bus section of each integrated control system;
 - generating a common, 3 phase, variable frequency, pulse-width-modulated output from the output inverter sections of each integrated control system; and
 - controlling the AC motor with a parallel controller interfaced with each integrated control system controller.